

CLAIMS

1. An image forming apparatus, comprising:  
a specific document determining module configured to  
determine whether an original document is a specific  
document, the specific document determining module  
including a microwave sensor; and

means for moving the microwave sensor to detect an  
abnormality in the operation of the microwave sensor.

2. The image forming apparatus of claim 1, further  
comprising:

a controller configured to control copying  
operations of the image forming apparatus, the controller  
restricting operation of the image forming apparatus when  
the abnormality of the microwave sensor is detected.

3. The image forming apparatus of claim 1, wherein  
the means for moving comprises:

means for moving the microwave sensor to a position  
close to a non-metallic member;

means for irradiating the non-metallic member and  
forming a first output signal of the microwave sensor;  
and

means for determining whether the first output  
signal indicates the abnormality in the operation of the  
microwave sensor.

4. The image forming apparatus of claim 3, further  
comprising:

means for moving the microwave sensor to a position close to a metallic member;

means for irradiating the metallic member and forming a second output signal of the microwave sensor; and

means for determining whether the second output signal indicates the abnormality in the operation of the microwave sensor.

5. The image forming apparatus of claim 4, further comprising:

means for comparing the first output signal and the second output signal to determine an indication of the abnormality in the operation of the microwave sensor.

6. An image forming apparatus, comprising:

a specific document determining module configured to determine whether an original document is a specific document, the specific document determining module including a microwave sensor; and

means for moving the microwave sensor to detect an abnormality in the microwave sensor.

7. The image forming apparatus of claim 6, further comprising:

means for optically reading image data from the original document;

a controller configured to control copying operations of the image forming apparatus by changing an

image processing method applied to the image data so that an image formed with the image data is differentiated from an image corresponding to the original document, when the abnormality of the microwave sensor is detected; and

an image processor for (1) receiving the image data, and (2) image processing the received image data using the image processing method changed by the controller.

8. The image forming apparatus of claim 6, wherein the means for moving comprises:

means for moving the microwave sensor to a position close to a non-metallic member;

means for irradiating the non-metallic member and forming a first output signal of the microwave sensor; and

means for determining whether the first output signal indicates the abnormality in the operation of the microwave sensor.

9. The image forming apparatus of claim 8, further comprising:

means for moving the microwave sensor to a position close to a metallic member;

means for irradiating the metallic member and forming a second output signal of the microwave sensor; and

means for determining whether the second output signal indicates the abnormality in the operation of the microwave sensor.

10. The image forming apparatus of claim 9, further comprising:

means for comparing the first output signal and the second output signal to determine an indication of the abnormality in the operation of the microwave sensor.

11. An image forming apparatus, comprising:

a specific document determining module configured to determine whether an original document is a specific document, the specific document determining module including a sensor section configured to move a microwave sensor to detect an abnormality in the operation of the microwave sensor.

12. The image forming apparatus of claim 11, further comprising:

a controller configured to control copying operations of the image forming apparatus, the controller restricting operation of the image forming apparatus when the abnormality of the microwave sensor is detected.

13. The image forming apparatus of claim 11, wherein the sensor section is configured to move the microwave sensor to a position close to a non-metallic member, to irradiate the non-metallic member, and to form a first output signal of the microwave sensor; and

the specific document determining module further comprises a signal processing section configured to determine whether the first output signal indicates the abnormality in the operation of the microwave sensor.

14. The image forming apparatus of claim 13, wherein the sensor section is configured to move the microwave sensor to a position close to a metallic member, to irradiate the metallic member, and to form a second output signal of the microwave sensor; and

the signal processing section is configured to determine whether the second output signal indicates the abnormality in the operation of the microwave sensor.

15. The image forming apparatus of claim 14, wherein the signal processing section is configured to compare the first output signal and the second output signal to determine an indication of the abnormality in the operation of the microwave sensor.

16. An image forming apparatus, comprising:  
a specific document determining module configured to determine whether an original document is a specific document, the specific document determining module including a sensor section configured to move the microwave sensor to detect an abnormality in the microwave sensor.

17. The image forming apparatus of claim 16,  
further comprising a scanner unit configured to optically  
read image data from the original document;

a controller configured to control copying  
operations of the image forming apparatus by changing an  
image processing method applied to the image data so that  
an image formed with the image data is differentiated  
from an image corresponding to the original document,  
when the abnormality of the microwave sensor is detected;  
and

an image processor for (1) receiving the image data,  
and (2) image processing the received image data using  
the image processing method changed by the controller.

18. The image forming apparatus of claim 16,  
wherein the sensor section is configured to move the  
microwave sensor to a position close to a non-metallic  
member, to irradiate the non-metallic member, and to form  
a first output signal of the microwave sensor; and

the specific document determining module further  
comprises a signal processing section configured to  
determine whether the first output signal indicates the  
abnormality in the operation of the microwave sensor.

19. The image forming apparatus of claim 18,  
wherein the sensor section is configured to move the  
microwave sensor to a position close to a metallic

member, to irradiate the metallic member, and to form a second output signal of the microwave sensor; and the sensor section is configured to determine whether the second output signal indicates the abnormality in the operation of the microwave sensor.

20. The image forming apparatus of claim 19, wherein the signal processing section is configured to compare the first output signal and the second output signal to determine an indication of the abnormality in the operation of the microwave sensor.